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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,360	02/27/2004	Yoshiaki Tanaka	016887-1101	7905
22428	7590	11/14/2005	EXAMINER	
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			GRAINGER, QUANA MASHELL	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/787,360

Applicant(s)

TANAKA, YOSHIAKI

Examiner

Quana M. Grainger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 14 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 15A & 15B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show how the cartridge as depicted in figure 10 is connected to the rest of the drawing figures as described in the specification. It is unclear what part of the cartridge is depicted by figure 10 and how this part is connected to the rest of the drawing figures. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

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should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Title

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 10-26-2004 was considered by the examiner.

Specification

5. The disclosure is objected to because it does not fully discuss figure 10. Appropriate correction is required.

Claim Objections

6. Claims 8-12 are objected to because of the following informalities. Claim 8 recites a rectangular second portion but this is not discussed in the specification. Further, first, second,

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and third portions are not well defined in the specification and claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al.

The toner cartridge by Okada et al. comprising an untapered region extending from near a front end to a predetermined position along a longitudinal direction of an outer circumferential portion, and a tapered region extending from the predetermined position to near a rear end (figure 1).

Okada et al. teaches a developing device which can house a toner cartridge having, on an outer circumferential portion, a first untapered region 8 extending from near a front end to a predetermined position and a tapered region 10 extending from the predetermined position to near a rear end, comprising a toner cartridge guide inner wall which houses the toner cartridge, said toner cartridge guide inner wall having a second untapered region 8 in a region corresponding to the first untapered region of the toner cartridge when the toner cartridge is

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housed. The toner cartridge being configured to be inserted in and removed from the image forming apparatus along a longitudinal direction of said toner cartridge and having, on an outer circumference thereof, a tapered portion inclined along the longitudinal direction and an untapered portion substantially parallel to a direction to be removed (figure 1). The cartridge further comprising, on the outer circumference, a replenishment port for replenishing toner to the image forming apparatus, and a shutter member 6 which covers the replenishment port, said shutter member opening/closing the replenishment port when said toner cartridge is attached/detached to/from the image forming apparatus.

9. Claims 1-2, 4-7, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshino et al. The toner cartridge by Yoshino et al. comprises an untapered region extending from near a front end to a predetermined position along a longitudinal direction of an outer circumferential portion, and a tapered region extending from the predetermined position to near a rear end (figure 2). An inclined surface is provided at a boundary region between said untapered region and said tapered region to connect said regions (figure 2).

Yoshino et al. teaches a developing device which can house a toner cartridge having, on an outer circumferential portion, a first untapered region 15 extending from near a front end to a predetermined position and a tapered region 15a extending from the predetermined position to near a rear end, comprising a toner cartridge guide inner wall which houses the toner cartridge, said toner cartridge guide inner wall having a second untapered region in a region corresponding to the first untapered region of the toner cartridge when the toner cartridge is housed (figure 4). The toner cartridge is configured to be inserted in and removed from the image forming

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apparatus along a longitudinal direction of said toner cartridge and having, on an outer circumference thereof, a tapered portion inclined along the longitudinal direction and an untapered portion substantially parallel to a direction to be removed (figure 4). The outer circumference, a replenishment port for replenishing toner to the image forming apparatus, and a shutter member 28 which covers the replenishment port, said shutter member opening/closing the replenishment port when said toner cartridge is attached/detached to/from the image forming apparatus.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (2003/0063927A1) in view of Tanaka et al. (4,916,490) in view of Iwata et al. (JP08-146744A, cited by applicant).

Wang et al. teaches a toner cartridge exchangeably mounted in an image forming apparatus, comprising: a first portion which extends in a longitudinal direction, has a substantially cylindrical shape, and contains toner; a second portion which is formed integrally with said first portion along the longitudinal direction; a container which has a third portion integrally formed with at least part of said first portion along the longitudinal direction; a toner agitating member provided on said first portion; a screw provided on said third portion; a

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discharge port which is formed in one end of said third portion to discharge toner conveyed by said screw; a lid member which opens/closes said discharge port as said toner cartridge moves relative to the image forming apparatus when said toner cartridge is replaced; a plurality of gears which are provided at one end of said container and outside said container to rotate said screw and said toner agitating member; and a cap, which closes one end of said container which is located opposite to a side where said plurality of gears are provided along a longitudinal direction of said container, has a grip (end of 11, 12) with which said container can be pulled out (figure 3). The container has a tapered portion at least partly along the longitudinal direction. The container has a tapered portion inclined in the longitudinal direction, and an untapered portion. The cartridge further comprising an opening/closing member for opening/closing a replenishment port of the image forming apparatus. The toner is collected to a central portion of said container along the longitudinal direction by rotation of said screw and conveyed from near the central portion toward the opening portion by said screw (figure 4). Wang et al. does not teach a grip which allows discrimination of a color of toner, and amount of toner contained in said container.

Tanaka et al. teaches a grip 29 with which a container can be pulled out, and which allows discrimination of the color of toner within the container (figure 2).

Iwata et al. teaches a container having a portion that allows discrimination of a color and amount of toner contained in said container (abstract; figures 1a-b, 3, 4, 5a-c, 6a-b, 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Tanaka et al. and Iwata et al. with the image forming device of

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Wang et al. to easily obtain the color and the amount of the toner in a container (Iwata et al.; purpose: lines 1-7).

Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wang et al. (6,188,859) teaches pertinent prior art.

Allowable Subject Matter

12. Claims 3 and 14 are allowed.

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quana M. Grainger whose telephone number is 571-272-2135. The examiner can normally be reached on 8am-6pm.

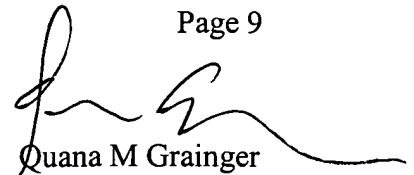
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Quana M Grainger', with a long horizontal flourish extending to the right.

Quana M Grainger
Primary Examiner
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QG